



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,589	03/29/2005	Philip Edward Haskell	05-217	9023

20306 7590 02/09/2007  
MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP  
300 S. WACKER DRIVE  
32ND FLOOR  
CHICAGO, IL 60606

EXAMINER
----------

CUMMING, WILLIAM D

ART UNIT	PAPER NUMBER
----------	--------------

2617

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/09/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/529,589

Applicant(s)

HASKELL &amp; HICKLING

Examiner

WILLIAM D. CUMMING

Art Unit

2617

— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,4-8,12,13 and 15-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,4-8,12,13 and 15-17 is/are allowed.
- 6) ☒ Claim(s) 18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 March 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION*****Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicants' submission filed on November 1, 2006 has been entered.

***Drawings***

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the application of the complex weight as stated in claim 18 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

3. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet,

and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

#### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claim 18 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification does not originally disclose and inadequately describe a splitter, a combiner and a component amplifier is in between the application of the complex weight. The "*written description*" of the invention required by first paragraph of 35 USC §112 is separate and distinct from that paragraph's

requirement of enabling disclosure, since description must do more than merely provide explanation of how to "*make and use*" the invention. Applicant must also convey, with reasonable clarity to those skilled in the art, that applicant, as of the filing date sought, was in possession of the invention, with the invention being, for purpose of "*written description*" inquiry, whatever is presently claimed.

Drawings alone may, under proper circumstances, provide "*written description*" of the invention required by 35 USC §112, and whether the drawings are from design application or utility application is not determinative. In order to satisfy "*written description*" requirement of 35 USC §112, the proper test is whether drawings conveys, with reasonable clarity to those of ordinary skill in the art, the claim subject matter.

6. Claim 18 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The specification fails to provide an enabling disclosure on how a splitter, a combiner and a component amplifier can be in between the application of the complex weight since application of the complex weight is a non-physical entity.

***Claim Rejections - 35 USC § 101***

7. Claim 18 is rejected under 35 U.S.C. 101 because the claimed invention is not supported by either an asserted utility or a well established utility.

It is impossible for a physical device, like a splitter, a combiner and a component amplifier to be in between a non-physical entity, the application of the complex weight since application of the complex weight is a non-physical entity.

***Allowable Subject Matter***

8. Claims 1, 4-8, 12, 13, and 15-17 are allowed.
9. As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Ke, et al** disclose a wireless system combining arrangement.

11. If applicants wish to request for an interview, an *"Applicant Initiated Interview Request"* form (PTOL-413A) should be submitted to the examiner prior to the interview in order to permit the examiner to prepare in advance for the interview and to focus on the issues to be discussed. This form should identify the participants of the interview, the proposed date of the interview, whether the interview will be personal, telephonic, or video conference, and should include a brief description of the issues to be discussed. A copy of the completed *"Applicant Initiated Interview Request"* form should be attached to the Interview Summary form, PTOL-413 at the completion of the interview and a copy should be given to applicant or applicant's representative.

### **Electronic Notification of Outgoing Correspondence (e-Office Action)**

Effective December 16, 2006, the United States Patent and Trademark Office (Office) will begin a pilot program to provide a limited number of Private PAIR users with the option of receiving electronic notification of some outgoing correspondence related to their US patents and US national patent applications retrievable through Private PAIR instead of a paper mailing of the correspondence. Patent Cooperation Treaty (PCT) applications will not be included in this pilot.

Participants in this pilot program will no longer receive paper mailings for most correspondence originating from a Technology Center. However, since several areas of the Office have independent mailing processes, pilot participants will continue to receive paper mailings for correspondence originating from several areas of the Office including, but not limited to: Office of Initial Patent Examination, Petitions, PCT, Appeals, Publications, Interference, and Reexamination.

A Private PAIR user will be able to opt-in to receive electronic mail message (email) notifications of outgoing correspondence by selecting the appropriate choice on the Customer Number Details screen for a customer number associated with a correspondence address after logging in to Private PAIR and providing between one and three email addresses to be used for these notifications. The Private PAIR user must be a registered patent attorney or agent of record, or a pro se inventor who is a named inventor in the application associated with the customer number through which Private PAIR is accessed. The Office will then send a notification to each provided email address if a new outgoing correspondence has been prepared for the patents or patent applications associated with the user's Customer Number. Each email notification will list all applications, associated with the corresponding Customer Number, in which new outgoing correspondence was prepared for the corresponding electronic application files within the preceding 24 hours. Each email notification will be entered into the corresponding application files. The new outgoing correspondence will become available for viewing and downloading through Private PAIR within two business days of the date of the email notification.

Applicants will have the ability to opt-in or opt-out of receiving electronic notification of Office actions at any time. However, the status of each individual outgoing correspondence, whether electronic or paper, will be determined at the time of the

printing of the form PTOL-90 cover sheet (at the time the outgoing correspondence becomes available for viewing, i.e., the date indicated on the correspondence).

The email notification described above will be sent after the Office action has been prepared and entered into the record. The period for reply to any Office correspondence to which a reply is required will commence on the date indicated on the outgoing Office such outgoing correspondence for all other purposes (e.g., 37 CFR 1.71(g)(2), 1.97(b), 1.701 through 1.705). The Office communication will become available for downloading and viewing through Private PAIR on the date indicated on the correspondence.

If none of the documents in each of the applications listed in the email notifications are viewed or downloaded through Private PAIR within seven calendar days after the emails are sent, a courtesy postcard notifying the applicant of the availability of electronic Office action will be mailed to the correspondence address associated with the applicant's corresponding Customer Number for each of those applications. The mailing of a courtesy postcard will not restart the time period for reply, and the period for reply to any outgoing Office correspondence to which a reply is required will continue to be measured from the date indicated on such outgoing Office correspondence.

Please note that the email notification procedure outlined above is simply an automated email sent by the Office to alert applicant that an official Office correspondence has been entered in the official record that will be available for viewing via private PAIR. It is not an email sent by the examiner and does not alter the Office policy prohibiting an applicant or examiner from engaging in improper email correspondence. See MPEP section 502.03.

The e-Office Action Pilot Program will begin with a limited number of participants. The Pilot Program will last approximately six months. Upon the conclusion of the pilot program the success of the pilot will be evaluated. At that time decisions will be made as to whether or not to make modifications to the e-Office action program and whether or not to permanently implement the program.

Thus, if the pilot program is successful and a decision is made to permanently implement the program, it is expected that the e-Office Action Program will go into full production sometime around June 2007 at which point the program will be open to all users (registered patent attorney or agent of record, or a pro se inventor who is a named inventor in the application associated with the customer number through which Private PAIR is accessed) having a Customer Number and access to Private PAIR.

For further information please contact the Patent Electronic Business Center (EBC) 866-217-9197 (toll-free) or 571-272-4100 Monday through Friday from 6 a.m. to 12 Midnight Eastern Time or send e-mail to [ebc@uspto.gov](mailto:ebc@uspto.gov)

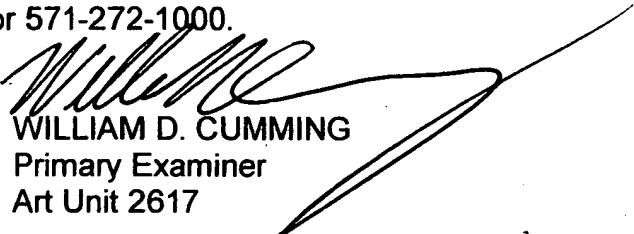
Date 12/19/2006



12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **WILLIAM D. CUMMING** whose telephone number is 571-272-7861. The examiner can normally be reached on Monday-Thursday 11am-8:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on 571-272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
WILLIAM D. CUMMING  
Primary Examiner  
Art Unit 2617



UNITED STATES  
PATENT AND  
TRADEMARK OFFICE

---

William Cumming  
Primary Patent Examiner  
[William.Cumming@uspto.gov](mailto:William.Cumming@uspto.gov)